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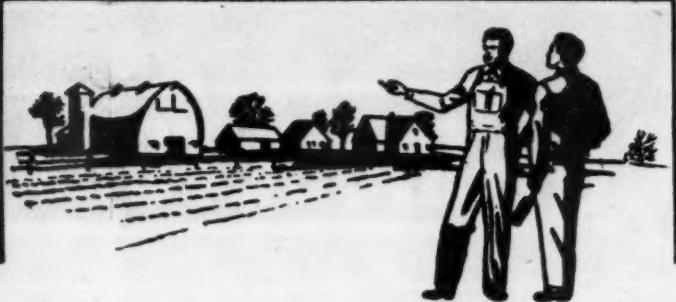
NUMBER 10



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**Featuring— Guidance in the
Vocational Agriculture Program**

The Agricultural Education Magazine



A monthly magazine for teachers of agriculture. Managed by an editorial board chosen by the Agricultural Section of the American Vocational Association and published at cost by Interstate Printers and Publishers, Danville, Illinois.

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Editorials

The Teacher of Agriculture as Guide and Counselor

PHILIP S. BARTON, Teacher Education,
University of New Hampshire

The guidance and counseling of students and prospective students is one of the most, if not the most, serious responsibilities the teacher of agriculture must assume.

It is a responsibility that is with him almost constantly, in fact a major part of the activities of a good teacher consist of guiding and counseling with his students. Democracy in the classroom most assuredly involves guidance. The on-farm instruction, the Future Farmers of America, the Young Farmer Association Meetings, and the group and individual conferences held during scheduled conference periods are primarily devoted to guiding and counseling.

Teachers have some tendency to associate the word guidance with a formal program carried out under the direction of a guidance officer usually designated as the director or head counselor.

This formal type of organization is most likely to be found in some of the larger high schools but is not so common in many of the smaller secondary schools in which a program of Vocational Agriculture is offered. The value of such a formal guidance program still depends to a great extent on the cooperation of every teacher in the school and not alone by those individuals having an official guidance title. The same is also true in the less formal setup where the principal usually assumes responsibility for directing guidance.

The teacher of Vocational Agriculture should be playing a most vital role regardless of the method of organization of the guidance program in a particular school.

To handle his guidance responsibilities well he must already have, or he must develop, certain attitudes, abilities, skills, and knowledges that are fundamental to all guidance work. The following are a few examples of what is meant.

He must want to assist people in becoming better able to help themselves. He must believe sincerely in the basic soundness of vocational training in agriculture, and he must so far as possible be completely impartial and free from visible emotional pressures in his relations with his advisees. He must develop skills and abilities necessary to the starting of a group discussion or a personal conversation and to direct the discussion or conversation toward the problems of his students and toward a logical plan for their solution.

From the Editor's Desk . . .

The future is already with us. The effects of the "space" age are being felt in our schools at this very moment, especially by guidance workers. It is doubtful that even the scientists and mathematicians will be affected as much by the stresses and strains of the almost hysterical effort to produce great numbers of scientists and engineers as will be those who try to provide sound guidance for our school age youth. Because of the high pressure sales talks and financial aids in the science field, many capable boys and girls may fail to consider the many other factors which must enter into the making of a sound vocational choice.

Many of the statements made by leaders in space age developments are being carefully ignored by those who clamor for a crash program for conquering outer space. Examples of these statements which directly affect vocational education are:

1. Russian scientific progress rests on a foundation of armies of technical workers without whom there would be no space progress.
2. The prosperity of our nation depends, to a large extent, upon the vitality of our vocational programs.
3. There is not so much a need for more engineers as there is a need for better trained engineers.
4. The conquest of outer space will mean little if, because of the effort to achieve it, we so neglect other aspects of education and human endeavor that we lose sight of the human values so important to our way of life.

The above are just examples of the thoughts the vocational agriculture teacher will have as he tries to help the student decide for or against an agricultural occupation. The teacher will have to remember that neither vocational education in agriculture nor science education is best for everyone. To make the wrong choice may result in great waste of human resources as students flounder in programs for which they are unsuited even though they are very capable scholastically. Still worse, capable leadership will have been lost to fields in which these persons could have excelled, and this may yet be the greatest peril to our nation.

Ironically, there is no effort to reduce support for vocational education. It is rather an effort to shift support to a different vocational field—the professions in science.

A study leads to a challenge . . .

How Young Farmers Become Established*

ARTHUR M. AHALT, Teacher Education, University of Maryland

TO become successfully established is the goal of all young men who want to become farmers. Helping these young men to become established is the primary objective of vocational agriculture.

Many factors enter into the accomplishment of this objective among which are family relationships, community activities and organizations, finances, education and training, ability and opportunities available.

In recent years becoming established has become more difficult because of higher initial and operating capital needs of farmers. Fortunately, higher prices for farm produce prevail and there are more available sources of credit. However, the problem of helping young farmers to become established is more difficult to solve under current conditions than ever before in history.

To ascertain how young farmers have become established in Maryland in the postwar years, the Department of Agricultural Education at the University of Maryland undertook a study to determine paths they followed in becoming established including their net worth accumulation in different steps, how they located their farms, the sources of information used in the process of becoming established, the problems they faced and how they attempted to solve them, the help they received from agricultural agencies, and how vocational agriculture could give them additional help.

Three counties (Charles, Frederick and Talbot), representing different types of farming in Maryland, were selected for the study. In each county 50 recently established young farmers were interviewed in 1954. Those included in the study were limited to young farmers who had become established since World War



Arthur M. Ahalt

II, and who were in some phase of ownership (share tenants, cash tenants, owners and partnerships). Not included were those over 40 years of age, hired hands, farm managers, those working at home without a definite agreement, and partnerships in operation for less than two years. The latter were not included because in the early stages many partnerships are arranged loosely and indefinitely.

Summary of Findings

The 150 young farmers included in the study averaged 29 years of age and ranged from 18 to 40 years. Their educational level averaged 10.7 grades, with 86 per cent graduating from high school.

The average age at which the young men made their first decision to farm was 17. They were sure they would be able to farm at an average age of 21 and they became farm operators at an average age of 23.

The major reasons the young men decided to farm were: (1) they liked farming, (2) family influence, (3) opportunity to get a farm, and (4) the freedom and independence of farming.

Almost half (45 per cent) of the young men had taken vocational agriculture in high school and over a third (36 per cent) had been members of 4-H clubs, with about a fourth (23 per cent) participating in both programs. Most of those who had not taken vocational agriculture said the reason was that it was not offered while they were in school.

Livestock alone was the most dominant type of farming program in both vocational agriculture and 4-H club work, with a combination of livestock and crops being next in importance. Those who had farming programs had an average annual labor income of \$445.

Nearly half (Figure 1) of the young farmers were established in partnerships at the time of the study, with about the same proportion in each of the three counties. Cash tenants, share tenants and owners were the other establishment categories in which the young men were found.

* Summarized from "How Young Farmers Become Established," by Arthur M. Ahalt and Ray A. Murray, Agricultural Experiment Station Misc. Publication No. 271, The University of Maryland, July 1956. 35 pp.

Letters to the Editor

January 29, 1958

To the Editor:

The article by my good friend, Elmer Johnson, in the February issue of the *Agricultural Education Magazine* makes clear the need for some new terminology in agricultural education.

Most of us regard vocational agriculture as a superior form of agricultural education and nonvocational agriculture as an inferior form of agricultural education. History and practice support these concepts.

We have also come to regard "vocational agriculture" as agricultural education supported in part by national funds; any agricultural education financed with local or state funds thus becomes "nonvocational agriculture" automatically.

We have further narrowed our concept of vocational agriculture to the education of farmers and prospective farmers.

Of course, the real distinction between vocational and nonvocational agriculture is quite different from the distinction we have been making. Vocational agriculture is for those who are engaged in or who expect to engage in agriculture. Nonvocational agriculture is for those who are not engaged in and do not expect to engage in agriculture.

There are at least three types of agricultural education, two of them vocational in character:

1. Education in farming (the federally reimbursed type).
2. Education in non-farming agricultural occupations, which is now financed from state and local funds and from national funds for industrial and distributive education.
3. Nonvocational agriculture, financed from local funds and general state school funds.

The clientele, purposes, content, and procedures in nonvocational agriculture should be markedly different from those in vocational agriculture. The instruction given should be as functional for the students enrolled as vocational agriculture is functional for farmers and prospective farmers. To be effective, it could not possibly be conducted as Mr. Johnson says nonvocational agriculture is conducted.

I have no hope that we shall soon arrive at a new and acceptable terminology, or that our prejudices

How Young Farmers - - -

(Continued from page 220)

Cash tenancy prevailed in Frederick County, share tenancy in Talbot Coun-

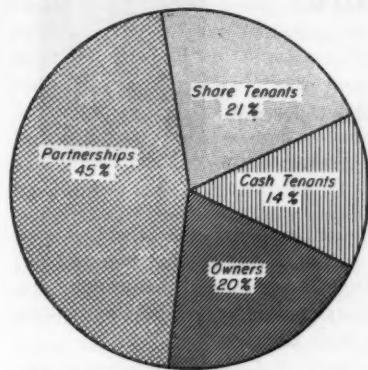


Figure 1. The Establishment Status of Young Farmers Surveyed in Maryland.

ty and ownership in Charles County. There was no apparent explanation for this distribution.

No particular patterns existed among the young men in their paths towards establishment, but certain steps did occur more frequently than others (Figure 2). Two of the most frequent steps were the son at home without a definite wage and the son at home with a definite wage. In

addition to those in partnership at the time of the study (45 per cent), another group (8 per cent) had been in partnership in their progress towards establishment. Altogether, a total of 73 per cent of the young farmers had participated in at least one step that involved father-son working relationships. Some participated in two or more of these steps.

The highest average annual net worth accumulation of the young men was in cash tenant status (\$2,262.). Other operator categories involving managerial decisions were also high (full owner-\$1,915; partnership-\$1,022; and share tenant \$905). Conversely, the average annual net worth accumulation in all wage earning categories was low, (son at home without definite wages-\$34; hired man away from home \$239; farm manager-\$286; non-farm work-\$302; and son at home with wages-\$314).

Most of the young men were aided in their efforts to find a farm by their parents, but other relatives and friends were helpful in a sizeable number of cases. A small group (8 per cent) said they needed no help. The major problems they encountered in becoming established involved finances, labor and land. They solved

these problems primarily by borrowing money from conventional sources, working longer hours and renting additional land when it became available.

The major sources the young men used to obtain agricultural information before they started farming, in order of importance, were: Fathers, magazines, vocational agriculture instructors, neighbors, county agents, and relatives outside of the immediate family. The major sources used after they became established in farming, in order of importance, were: Magazines, county agent, fathers, and neighbors.

Slightly over half of the young men indicated the local department of vocational agriculture could aid them further by offering evening class instruction.

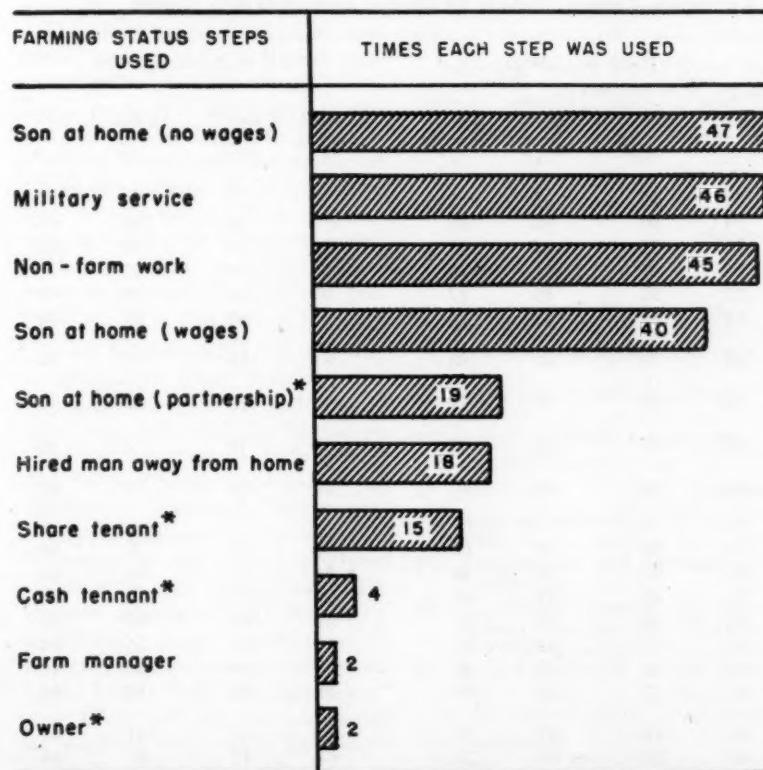
Conclusions

The young men included in this study were considered to be typical of young farmers in Maryland. While each had his own particular problems, many common problems existed.

The most outstanding fact revealed was the high percentage that were involved in some type of father-son farm business relationship as they traveled the path towards establishment and after they became established. It is likely that similar high percentages would prevail in many rural communities.

This means that an increasing amount of attention should be given to father-son relationships by vocational agriculture teachers. A unit of instruction in the last year of the all-day program would be quite helpful, but teachers might better consider an out-of-school class composed of fathers and sons working together. This class could consist of a series of meetings on problems common to father-son working arrangements and sharing agreements of all kinds.

Furthermore, the fact that a large proportion of the young men felt that vocational agriculture could help them through evening class instruction should serve as a challenge to vocational agriculture teachers to develop such a program in these counties. It should also indicate that teachers in other communities, where there are no out-of-school programs, should survey the needs to see if they should establish such a program. □



*These steps are in addition to the status of the young farmers at the time of the survey.

Figure 2. Frequency of Steps Used by Young Farmers in Becoming Established.

Worry often gives a small thing a big shadow. Swedish Proverb



Ralph R. Bentley

Factors Influencing Agriculture College Students to Choose Agriculture as a Career

Ralph R. Bentley and Paul E. Hemp, Teacher Education, Purdue University



Paul Hemp

Editor's Note: This is the first in a series of three articles dealing with the occupational choices of agriculture college students.

The choice of an occupation is without doubt one of the most important decisions a person makes during his lifetime. This decision determines to a large extent who his friends and associates will be, what financial rewards he will receive for his work, the location of his home and place of work, and many other factors having to do with his life activities.

This study¹ was undertaken in an effort (1) to discover why students in colleges of agriculture at Purdue University and the University of Illinois chose agriculture as a career, and

(2) to determine whether there were significant differences among various groups of students with respect to the factors which influenced them to choose agriculture as a career.

The data for this study were obtained from freshmen and senior agriculture college students who responded to 20 selected factors as having influenced them "a great deal," "little," or "not at all" in their choice of agriculture as a career.

The percentages of student responses were computed and the significance of difference between each of the following groups was determined: (1) Purdue freshmen and seniors, (2) Illinois freshmen and seniors, (3) Purdue agricultural edu-

cation students and other² Purdue agriculture college students, and (4) Illinois agricultural education students and other² Illinois agriculture college students.

Table I shows the number of students by groups and the percentage who indicated that they were influenced "a great deal" or "little" by each of the twenty factors.

The percentages shown in Table I indicate that factors influencing the most students in their choice of agriculture as a career were "interest in out-of-doors," "interest in farm life," "experience in farming," "work with

¹ The study was designed and the data were summarized by Dr. Ralph R. Bentley of Purdue University. The Illinois data were collected by Dr. A. H. Krebs of the University of Illinois.

² "Other" refers to students majoring in animal husbandry, dairy, agricultural economics, and general agriculture.

(Continued on page 223)

Table I. Factors Influencing Agriculture College Students To Choose Agriculture as a Career

	Year in College				Field of Specialization			
	Purdue		Illinois		Purdue		Illinois	
	Freshmen N=411 %*	Senior N=198 %*	Freshmen N=410 %*	Senior N=229 %*	Ag.Ed. N=131 %*	Other** N=287 %*	Ag.Ed. N=95 %*	Other** N=354 %*
1. Interest in out-of-doors-----	99	97	98	97	98	98	100	100
2. Interest in farm life-----	94	97	93	95	100	99	100	98
3. Experience in farming-----	84	93	86	89	99	91	99	93
4. Work with livestock-----	82	85	83	93	97	91	97	90
5. Work with farm crops-----	82	91	85	87	97	91	98	68
6. Work with farm machinery-----	78	84	83	78	93	86	97	89
7. Seemed to drift naturally into agricultural work -----	81	79	83	83	81	85	80	82
8. Agriculture seemed to offer greater opportunities for employment-----	74	70	78	74	77	75	90	60
9. Acquaintance with agriculture leaders-----	68	69	65	68	88	70	93	66
10. Was impressed by fine livestock and crops at fairs-----	66	58	66	56	77	69	73	68
11. Agriculture seemed to offer greater opportunities for financial reward than other fields-----	61	55	69	63	61	63	70	69
12. 4-H Club experience-----	61	63	52	48	81	67	65	55
13. Studying agriculture in high school-----	54	45	62	54	72	51	82	63
14. Judging team experience-----	48	38	50	40	58	49	60	50
15. Studying vocations in high school-----	52	37	61	35	50	51	51	54
16. Visiting an agriculture college-----	50	43	45	38	54	53	54	44
17. FFA Chapter experience-----	37	27	58	50	41	36	73	60
18. Never had any real impulse to do anything else -----	41	34	47	45	44	54	51	49
19. Prizes won at agriculture fairs-----	45	32	43	33	61	47	46	45
20. Expect to inherit a farm some day-----	37	37	41	35	30	50	34	48

*These percentages include persons responding "a great deal" or "little" to each of the factors.

**"Other" refers to students majoring in animal husbandry, dairy, agricultural economics, and general agriculture.

Factors Influencing - - -

(Continued from page 222)

livestock," "work with farm crops," "work with farm machinery," and "seemed to drift naturally into agriculture work." Next in importance in terms of number of students influenced were the factors "agriculture seemed to offer greater opportunities for employment," "acquaintance with agriculture leaders," "was impressed by fine livestock and crops at fairs," "agriculture seemed to offer greater opportunities for financial reward than other fields," "4-H Club experience," and "studying agriculture in high school." Less than half of most groups were influenced by such factors as "judging team experience," "studying vocations in high school," "visiting an agriculture college," "FFA Chapter experience," "never had any real impulse to do anything else," "prizes won at agriculture fairs," and "expect to inherit a farm some day."

In interpreting the percentages in the tables, the reader should not assume that all students have had opportunities to be influenced by all factors. For example, many more students probably have had farming experience than judging experience.

Year in College

The percentage of freshmen and senior students who indicated they were influenced "a great deal" or a "little" by each of the twenty factors are shown in Table I. In order to point out more clearly the significant differences between the responses of these groups and to show the percentage distribution of their responses to factors where significant differences were found, Table II was prepared.

It can be observed in Table II that a significantly larger percentage of freshmen than seniors at both universities were influenced by the factors "studying vocations in high school" and "FFA Chapter experience." At Purdue, a significantly larger percentage of freshmen than seniors were influenced by the factors "studying vocations in high school" and "FFA Chapter experience." At Purdue, a significantly larger percentage of freshmen than seniors were influenced by the factors "4-H Club experience," and "never had any real impulse to do anything else"; while at Illinois, a significantly larger percentage of freshmen than seniors were influenced by the factors "was impressed by fine livestock and crops at fairs,"

Table II. Factors Which Show Significant Chi-Square Differences When the Responses of Freshmen and Seniors Are Compared

Factor		A ¹ %	L ² %	N ³ %	Chi-square
Purdue University					
5. Work with farm crops-----	Freshmen	55	27	18	
	Seniors	54	37	9	12.435*
12. 4-H Club experience-----	Freshmen	40	21	39	
	Seniors	30	33	37	10.592*
15. Studying vocations in high school -----	Freshmen	13	39	48	
	Seniors	4	33	63	18.926**
17. FFA Chapter experience-----	Freshmen	19	18	63	
	Seniors	8	19	73	11.233*
18. Never had any real impulse to do anything else-----	Freshmen	19	32	49	
	Seniors	14	20	66	14.782**
University of Illinois					
7. Seemed to drift naturally into agriculture work -----	Freshmen	48	35	17	
	Seniors	57	26	17	9.308*
10. Was impressed by fine livestock and crops at fairs-----	Freshmen	29	37	34	
	Seniors	15	41	44	17.948**
11. Agriculture seemed to offer greater opportunities for financial reward than other fields-----	Freshmen	24	45	31	
	Seniors	13	50	37	10.635*
13. Studying agriculture in high school -----	Freshmen	45	17	38	
	Seniors	31	23	46	11.501*
15. Studying vocations in high school -----	Freshmen	22	39	39	
	Seniors	6	29	65	47.206**
17. FFA Chapter experience-----	Freshmen	33	25	42	
	Seniors	22	28	50	9.396*
19. Prizes won at agriculture fairs-----	Freshmen	17	26	57	
	Seniors	7	26	67	15.038**

¹ A great deal.² Little.³ Not at all.

* Chi-square — Difference due to chance less than 1 in 100.

** Chi-square — Difference due to chance less than 1 in 1000.

Table III. Factors Which Show Significant Chi-Square Differences When the Responses of Agricultural Education and Other Agricultural College Students Are Compared

Factor		A ¹ %	L ² %	N ³ %	Chi-square
Purdue University					
1. Interest in farm life-----	Ag. Ed.	94	4	0	
	Others	86	13	1	10.44*
5. Studying agriculture in high school -----	Ag. Ed.	51	21	28	
	Others	31	20	49	18.03**
16. Prizes won at agriculture fairs-----	Ag. Ed.	16	45	39	
	Others	52	28	20	12.50*
17. Acquaintance with agriculture leaders -----	Ag. Ed.	41	47	12	
	Others	25	45	30	18.46**
20. Expect to inherit a farm some day -----	Ag. Ed.	13	17	70	
	Others	22	28	50	14.40**
University of Illinois					
5. Studying agriculture in high school -----	Ag. Ed.	60	22	18	
	Others	43	20	37	12.58*
17. Acquaintance with agriculture leaders -----	Ag. Ed.	40	53	7	
	Others	42	24	34	27.48**
18. Agriculture seemed to offer greater opportunities for employment -----	Ag. Ed.	36	54	10	
	Others	36	24	40	9.68*
20. Expect to inherit a farm some day -----	Ag. Ed.	5	29	66	
	Others	22	26	52	13.96**

¹ A great deal.² Little.³ Not at all.

* Chi-square — Difference due to chance less than 1 in 100.

** Chi-square — Difference due to chance less than 1 in 1000.

(Continued on page 229)



A supervisor and teacher of Vocational Agriculture co-operatively provide orientation and guidance for young farmers.



Excellent relationships between student-instructor are essential for effective guidance and orientation.

What do studies show?

Guidance and Orientation in Agricultural Education

AUSTIN E. RITCHIE, Teacher Education, Ohio State University

Guidance and orientation are not simply intellectual taxidermy or the mere teaching of people what they do not know, but it is the orderly assistance for students or others in acquiring wisdom for making steps toward purposeful goals. The capacity to estimate oneself unerringly in an environment reveals satisfactory orientation. Orientation is the act of fitting into an environment. Vocational guidance should be concerned with the individual and his adjustment to earning and living a good life. Guidance is both diagnostic and predictive.

Guidance and orientation are functions of teachers of vocational agriculture. The teachers, teacher educators, supervisors, school administrators, and guidance persons should be concerned with the problems, needs, techniques, and relationships affecting guidance. Some questions frequently raised by practitioners are: What is the role of the teacher of vocational agriculture concerning guidance of high school, out-of-school, and prospective college students? What are some effective guidance techniques? Which students should be enrolled in vocational agriculture? Other curricula?

A synthesis of selected studies noted herein is presented in a circumscribed treatise revealing the tenor of research in guidance and orientation during the years 1952 to 1957 in agricultural education. It is not an exhaustive review, but it is believed to be exemplary of the universe.

Is Guidance Needed?

Students want and need guidance, as indicated by Doane's (10) survey of high school youth, where 60 percent expressed interest in taking a course dealing with vocational choice and placement when asked to select five courses from among twenty. Hahn (13) reported that students with higher ability do not conclusively make more appropriate vocational education choices than the less gifted, and the family, often one of the poorest but most prolific sources of counseling, is frequently the major factor in determining educational and vocational choices.

A study reported by the American Personnel and Guidance Association (25) revealed that planning cannot be a "one-shot" process for all high school youth. Almost two-thirds of the high school youth in this study, 347, changed their vocational choice at least once during their high school period. The remaining one-third having consistent choices throughout high

school, in about 67 percent of the cases, entered the occupation of their high school choice. Those consistent in junior and senior years, in nearly 42 percent of the cases, entered that occupation.

Perhaps the preceding facts alone should be sufficient to indicate a need for projecting, conducting, and implementing the fructiferous findings from research in guidance.

Are Effective Guidance Techniques Needed?

A study completed in Maryland (22) reveals only 50 per cent of the teachers of vocational agriculture were satisfied with their guidance program. Recommendations for this study were: teachers of vocational agriculture should make greater use of appropriate techniques; vocational agriculture classes should meet the needs of the best farm boys and should prepare for agriculturally-related jobs as well as farming; and guidance counselors, principals, and other teachers should be better informed about the aims and purposes of vocational agriculture.

Rankin (26) found factors preventing teachers from performing additional guidance services which were: a lack of training and experience; a lack of time; and a lack of leadership in guidance.

Apparently, another limitation concerning effective guidance is the lack of familiarity with various tests for interests, attitudes, and aptitudes.

Nelson (23) reported the influence of organized school guidance pro-

(Continued on page 225)

Editor's Note: This is one of a series of articles sponsored by the A.V.A. Agr. Ed. Research Committee to review research findings and point up possible applications to our programs.

Guidance and . . .

(Continued from page 224)

grams with some time set aside for the person in charge revealed a greater participation of teachers in such school systems. Guidance personnel can assist teachers in interpreting and using tests and when and how to make student referrals. Such views would indicate teachers can benefit from increased participation with guidance programs in schools.

Gartley (12) found that the students' achievements in vocational agriculture are definitely related to their reading ability. He recommended that the teacher of vocational agriculture develop functional reading procedures as an integral part of the course of study in agriculture for: reading rate; main ideas; word recognition, skimming; comprehension; locating information; details; direction; and reading critically.

Do students give teachers and parents credit for their becoming established in farming? Westfall (34) found 50 per cent gave one or both parents, and 26 per cent gave the parents and teachers of agriculture, credit for their becoming established in farming. The interest of the teacher in his students was listed as the best-liked teacher characteristic. Such evidence should behoove teachers to counsel closely with boys and their parents regarding vocational agriculture, becoming established in farming and other occupations.

The writer encountered little research in agricultural education dealing with broad and comprehensive testing programs or the utilization of school guidance programs as an aid for effective counseling. More research and implementation is needed.

It is recognized by the writer that many teachers are conducting effective guidance and that the research reported herein does not necessarily indicate ineffective guidance in all cases. However, the examples of research drawn upon in this review indicate that increasing attention might be given to guidance in pre-service and in-service functions.

Who Should Enroll in Vocational Agriculture?

Studies of present and former students of vocational agriculture unveil many factors linked with farming status and opportunities and other pursuits. An opulence of information is available in arriving at criteria for

use in guiding and counseling students. The number of studies reported is indicative of assiduous leadership in directing and developing studies in this area.

Some assistance is revealed by Bjaraker (6) when he found a significant association between boys' expressed level of desire to remain on the farm and the following: the boys' measured attitude toward farming; the size of the home farm in acres; and the size of the farm business as expressed by the number of productive work units on that farm. Other factors having no significant association at the five per cent level with the level of desire to remain on the farm were: measured mental ability; socio-economic level of the farm family; size of the family; formal educational level attained by the parents; and farm ownership by the parents.

Lefors (19) found a correlation exists between marks received by pupils and the income earned after leaving school. The income earned, number of years in vocational agriculture, number of years in college, and the Future Farmer leadership scores tend to drop in the same ratio as the school marks received go down. Alexander (2) found a definite relationship between grade score and employment status. On the average, the students with the highest grades enrolled in college and those with the lowest grades remained in farming. Why should students with the lowest grades be the farmers? Did the students in Alexander's study experience effective guidance programs? The writer would expect to find some top-level students in vocational agriculture and the business of farming. Agricultural educators should be deeply concerned with a situation like Alexander found.

Sutherland and Thompson (33) reported the plans of the pupils currently enrolled in vocational agriculture in California were: about 50 per cent to farm; 15 to 20 per cent to do related agricultural work; about 25 per cent undecided; and 5 per cent definitely not in agricultural work. The limited opportunity to get a start in farming was evidenced by the fact that 40 per cent of the rural group had no place to start. Forty-five per cent indicated they planned for at least two years of college.

The per cent of students planning to farm is somewhat consistent with the per cent of full- and part-time farmers. According to Sutherland and Thompson, 64 per cent of the students enrolled in vocational agriculture in California were from full-time and part-time farms or from larger farms where parents were farm laborers. These findings are somewhat associated with the recommendation made by Cassidy (8) that it appears unwise for teachers of agriculture to advise sons of non-farming fathers to take agriculture in high school since none of the sons of non-farming fathers farmed after leaving school.

Worthington (36) found limited farming opportunities in Ohio when he estimated the annual number of farming opportunities was at a replacement rate of 2.5 per cent of the number of farms.

A few studies regarding the status of graduates who had taken vocational agriculture are shown in Table I. The data show that about one-half to four-fifths of the graduates are engaged in farming or related occupations except Zahn's (37), where nearly two-fifths are in this category. In most of the states in which these data were gleaned, the per cent of graduates

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Table I. Vocational Status Following Graduation of High School Students Who Were Enrolled in Vocational Agriculture (From Selected Studies and States)

State	Researcher	Percent in Occupation**		
		Farming	Farming and Related	Non-agricultural
Ohio	Fraker (11)	74	81	13*
New York	Ketcham (17)	60	—	—
North Carolina	Bell (3)***	55	63	37
Nebraska	Nicklas (24)	53	57	43
Ohio	Bender (4)***	—	65	20*
Kansas	Zahn (37)	—	37	—
Georgia	Keene (15)	36	46	15*

*The remaining percent were in such categories as military service, college, deceased, and unemployed.

**Approximate percentage.

***Two to five years after graduation about 10 percent less were in farming and related occupations.

Guidance and - - -

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engaged in farming ranged from about 53 to 74 per cent. These findings support: conducting a program which will prepare farmers and young men interested in farming and related occupations; and guiding selected students into vocational agriculture.

A somewhat different approach for determining the future occupations of vocational agriculture graduates was reported by Corn (9), that about 50 per cent of the sons entered, on a full- or part-time basis, the occupations followed by their fathers during the years 1935 to 1941. In 1952, the major occupations of 21 per cent of the sons were the same as those of their fathers. Sons of non-farmers seldom entered farming as an occupation. He found the father-son occupational relationship a most reliable criterion when farming is the occupation under consideration. Alexander (2) reported a similar finding, that the farming status of fathers was a significant factor in helping boys get established in and continuing in farming. Most of the graduates who are farming or in related occupations came from farms which were owner-operated.

Do Young Farmers Need Guidance?

Only a few studies have been reported in the young farmer area which were classified under guidance and orientation in the *Summaries of Studies in Agricultural Education*. Such a disparity between the total number of studies and the paucity of those classified under guidance and orientation should engender a rigorous expansion of research in this area. The need for research is enhanced by Hemp (14) who found

68 per cent of the responsibilities which a majority of the farmers had assumed were first undertaken at the young farmer level.

It is believed much is known about guidance through the experience of teachers, teacher educators, supervisors, and others about assisting young men engaged in farming. Such knowledge and experience should be collected, evaluated, and recommendations made to those who are assuming or being prepared to assume responsibilities in the guidance of young farmers.

Steeves (27) identified ten factors which appear to be influential in predicting probable success or failure for beginning farmers, which are: liking for farm work; knowledge of agriculture; ambition and determination; farm experience; organization and decision-making ability; wife's cooperation; family health and ability to work; wise and full use of credit; effective use of farm records; and mechanical ability.

The National Young Farmer Study, presently under way and being sponsored by the American Vocational Association, should reveal findings and recommendations which should be helpful in this area. Other studies should follow to fill the gap in such an important area.

Is Curricular Guidance Needed?

Do prospective and present college students have problems which could have been avoided, partially at least, before entering college? What high school courses should prospective college and non-college students take?

Bender and Hoefflin (5) found there was a striking similarity of concern on the part of both college men and women in the areas of per-

sonal temperament and education. The men checked most often: concerned about the military service; weak in spelling; feel I need more schooling; weak in writing; vocabulary too limited; fail to go to church as often as I should; and I don't know how to dance.

Luster (20) reported that during the first two quarters in college the former students of vocational agriculture made slightly higher over-all grades than students without such experience. They received higher grades in agricultural subjects and mathematics, but generally made lower grades in English and chemistry.

Albracht (1) found that vocational agriculture graduates listed vocational agriculture, mathematics, and foreign language, in order, as courses they would take if they could repeat their high school training. Kesler (16) found from former vocational agriculture enrollees who left school prior to graduation, that mathematics, vocational agriculture, and English were the courses rated most important.

McBride (21) found 76 per cent of those with college training and 88 per cent of those without college training would again study vocational agriculture if they had the opportunity to repeat high school courses. Such a finding gives support to the worth of vocational agriculture programs. This view is somewhat supported by Woodin (35), who found 55 per cent decided to major in agriculture education while juniors and seniors in high school. Only 30 per cent decided upon a major after entering the College of Agriculture. Teachers of vocational agriculture were the most important persons in providing information concerning a major in college.

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Administrator-Faculty conferences where problems and test interpretations and use are discussed are valuable in improving guidance.



A Dean and a Professor aid prospective college students in making educational and vocational choices during a small group session.

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Is There Need for More Research?

One should pause and review the excellent summation by Byram and Nelson (7) to note progress or the lack of progress in research in guidance in agricultural education. Some of the following suggested studies pointed up in their review continue to be needs in agricultural education. Further study is needed in:

1. Identifying effective group and individual methods and procedures in guidance and orientation for teachers of vocational agriculture.
2. Utilizing selected interest, aptitude, and attitude tests in establishing their degree of validity for pre-enrollment and after-enrollment guidance in the vocational agriculture program for in-and out-of-school students.
3. Identifying and utilizing productive relationships and ways and means for effective guidance between the guidance personnel, supervisors, and administrators in secondary schools and the teachers of vocational agriculture, supervisors, and teacher educators.
4. Determining curricular content and activities concerned with guidance in the pre-service preparation and in-service education programs for teachers of vocational agriculture.
5. Determining vocational opportunities and the means of estab-

ishment through longitudinally designed research.

6. Identifying more clearly the guidance role of the teacher of vocational agriculture with in-school and out-of-school students.

Are There Generalizations?

Teachers, supervisors, and teacher educators in vocational agriculture, along with other leaders in education, have progressed considerably in effective guidance and research in this area. This is especially true when it is recognized that nearly all research conducted in agricultural education has direct or indirect implications for guidance and orientation.

Based on the findings, recommendations, needed studies, and opinion of the writer, the following generalizations are made:

1. That present and prospective teachers of vocational agriculture want and need more assistance in guidance and orientation.
2. That guidance and orientation are continuous functions with in- and out-of-school students.
3. That more research is needed to find answers which will enhance effective guidance and orientation.
4. That teacher educators, supervisors, and leading teachers need to find ways and means for implementing existing meritorious practices in guidance and orientation.
5. That teachers of vocational agriculture, teacher educators, and

supervisors must be broad-minded in guiding and counseling all students in our contemporary society.

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The Teacher - - -

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It is extremely important that he realize that he cannot do the thinking, make the plans, or arrive at problem solutions for his advisees; they and they alone must do this. His responsibility is to assist his students in better understanding of themselves, in recognizing their problems, and to help them to see various alternatives to the solution of their problems, and to select the most logical alternative for their particular situation.

He must be friendly toward his students in order for them to feel free to approach him with their problems. Above all, he must not ridicule or betray the confidence of a person he is counseling.

In most cases, the teacher of Vocational Agriculture is not a professionally trained counselor. If the

nature of the problem calls for the assistance of specially trained personnel, the teacher should guide the student in that direction rather than attempt such assistance himself.

The complexity of commercial farming, the large financial investment involved, and the apparent trends in agriculture place a great burden of responsibility on the teacher of agriculture if he is to provide sound and effective vocational guidance.

It is essential that he know each of his students well. To do this, he must have considerable background information on each and every one of them. Some of this information may be obtained from the permanent records in the school, some from the individual folder in the department; but a great deal of it must be obtained through personal visits to the homes for conferences with the students and

their parents and studies of the home farm situations for the purpose of determining establishment possibilities.

He must have a thorough knowledge of the opportunities for farming in the local area, trends in the various farm enterprises, and opportunities in the related occupations, together with information regarding post-secondary agricultural and non-agricultural training that is available and preparation needed for admission to such programs.

He needs to be familiar with the quality of the local schools, opportunities for religious worship, opportunities for social and recreational activities. He also needs to know whether or not the community is progressive, the people cooperative, and the standard of living satisfac-

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A Comparison of Vocational Interests of Graduates and Dropouts in a Junior College Agriculture Curriculum

Charles G. Morehead, School of Education, Department of Occupational Information and Guidance, North Carolina State College

Why is there such a large percentage of dropouts in a junior college agriculture curriculum? Is the interest pattern of junior college agriculture graduates different from that of drop-outs? If there are differences in interests, are these significant enough for guidance purposes?

As there were more dropouts than graduates among the agriculture students at this institution* during the three-year period covered in this study, an examination of their measured interests seemed worthwhile. If it was found that the interests of graduates were significantly different from those of dropouts, then the use of measured interests in counseling with students before they chose a major might help eliminate some of this costly trial and error approach in selecting a major in college.

Procedures Used

To find the answer to the question of differences of interests, the Strong Vocational Interest Blank for Men, taken by freshmen upon entrance in the fall semester of 1952, 1953, and 1954 academic years, was used. The Strong Vocational Interest Blank was included in the freshman testing program for all male students during these three years and was scored on 44 occupational keys and three special scales.

The 97 young men in this study were students in a junior college agriculture curriculum where most of them took the same subjects during the first two years. After completing two years of successful work in the junior college agriculture curriculum, students received an Associate in Science degree and many continued for a bachelor's degree in some field of agriculture in the state university.

The college, which had some 800 students at the time of this study, is located in a town of approximately 8,000 population, and draws most of its students from the small towns and communities in that geographic area. Few of the students came from high schools having guidance coun-

selors, and practically none were counseled in the college guidance bureau before choosing a major. The results of the Strong interest test were not available until a month after the opening of school, and therefore were not used until after the student had decided on his major.

In this study, a graduate is defined as a student who successfully completed the two-year junior college agriculture curriculum, whereas a dropout did not complete the two-year agriculture course; either he dropped out during or at the end of the first year or transferred to another school.

In examining the interest pattern of these junior college graduates and dropouts, their Strong interest profiles were compared in seven groups: I, biological sciences; II, physical sciences; IV, technical-mechanical; V, social service; VIII, business detail; IX, business contact; and X, linguistic. Individual occupational keys from these seven groups which were used for comparison were farmer, veterinarian, and vocational agriculture teacher.

A student's interests were considered similar to one of the seven groups if he had one or more A ratings with enough B plus ratings so that half or more of the ratings in a group were A or B plus. For example, in Groups II and IX, which have four and three occupational keys respectively, a student would have one A rating and one B plus rating before his interests would be considered similar to each group; in Groups I, V, and VIII, which have seven keys, he would have one A and three B plus ratings or two A and two B plus ratings for his interests to be considered similar to one of these groups.

A student's interests were considered similar to those of farmer, veterinarian, or vocational agriculture teacher if he had an A rating for that respective occupation.

Findings

Of the 97 agriculture freshmen who took the Strong interest test, 39 graduated and 58 dropped out or transferred to another school or curriculum. Forty-nine per cent of the graduates and 38% of the dropouts had interests similar to Group IV, technical-mechanical occupations, where the scales for farmer and vocational agriculture teacher are found. However, these percentages were not significantly different ($.3 > p > .2$).

Fourteen percent of the dropouts and 8% of the graduates had interests similar to Group VIII, business detail occupations. These percentages were not significantly different ($.4 > p > .3$). Percentages for all the other groups were practically identical.

Seventy-nine percent of the dropouts and 69% of the graduates had interests similar (A rating) to those of farmers. These percentages were not significantly different ($.3 > p > .2$).

Twenty-four percent of the dropouts and 15% of the graduates had interests similar (A rating) to those of veterinarian. These percentages were not significantly different ($.3 > p > .2$).

Forty-four percent of the graduates and 21% of the dropouts had interests similar (A rating) to those of vocational agriculture teachers. These percentages were significantly different ($.02 > p > .01$). Thus, over two times as many graduates as dropouts had interests similar to vocational agriculture teachers. This was the only significant difference in measured in-

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Table: Strong Interest Scores of Junior College Agriculture Freshmen

	Number having interests similar to following groups:									"A" rating on:		
	No.	I	II	IV	V	VIII	IX	X	Farmer	Voc. Agr.	Teacher	Veterinarian
Graduates	39	1	0	19	1	/3	3	0	27	17	6	
Dropouts	58	2	0	22	0	8	4	0	46	12	14	
Total	97	3	0	41	1	11	7	0	73	29	20	

* Arkansas Polytechnic College, Russellville, Arkansas, where the writer was Director of Counseling and Guidance when this study was made.

Letter to the Editor - - -

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against nonvocational agriculture will disappear rapidly. We should, however, be beginning to invent terms which are accurately descriptive of each type of agricultural education, which are short and snappy, so that they will find their way into common usage.

We might start by assuming that all nonfarmers need some kind of appropriate agricultural education. Most of it will probably be provided in the regular, nonagricultural school subjects; but some of it may be provided through special classes and activities for nonfarmers. This is a tremendous field, since it could serve most of the people of the United States. It must be developed almost from scratch, disregarding the bad precedents in so-called "nonvocational agriculture," which Mr. Johnson has so clearly delineated.

We shall also have to start from scratch in developing vocational education in the nonfarming agricultural occupations. The lack of special national aid for this program, which we in agricultural education may administer, should not deter us. If the program is needed, the money will be found.

We can continue to take great pride in vocational education in farming in which we have been specializing for the past forty years. We should all be as jealous as Mr. Johnson in protecting it from imitations and substitutes. We should recognize that we shall be unable to keep vocational education in farming as we want it to be unless the other two forms of agricultural education are developed. Vocational education in farming is adapted to no more than 12 per cent of the population. We can't keep the other 88 per cent completely out of agricultural education and we should not want to keep them out. If we have nothing to offer but vocational education in farming, many of the 88 per cent will be showing up sporadically in our classes for farmers and ruining the program for those for whom it is intended.

Most of all, we must keep from believing that there is only one legitimate form of agricultural education, the kind that can be provided under the national vocational education acts, and that it is so excellent that everyone should be enrolled in it. We should remember what happened to

Latin in the public schools, though the Latin teachers were confident that Latin could perform miracles for all that no other subject could perform.

Mr. Johnson seems to say that vocational education in farming is good agricultural education and that all other types are bad agricultural education. It is good agricultural education for those who need it; for those who need some other type, we should have equally good agricultural education.

H. M. HAMLIN

Factors Influencing - - -

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"agriculture seemed to offer greater opportunities for financial reward than other fields," "studying agriculture in high school," and "prizes won at agriculture fairs."

At Purdue University, senior students were influenced significantly more than freshmen by work with farm crops while at Illinois, senior students were influenced significantly more than freshmen by the factor "seemed to drift naturally into agriculture work."

Fields of Specialization

In order to show more clearly the significant differences between the responses of agricultural education students and other agricultural college students and to show the percentage distribution of responses to factors where significant differences were found, Table III was prepared.

A significantly larger percentage of agricultural education students than other agriculture college students at

both universities were influenced by the factors "studying agriculture in high school" and "acquaintance with agriculture leaders." At Illinois, a significantly larger percentage of agricultural education students than other agriculture college students were influenced by the factor "agriculture seemed to offer greater opportunities for employment."

At both universities, a significantly larger percentage of other agriculture college students than agricultural education students were influenced by the factor "expect to inherit a farm some day." At Purdue University, a significantly larger percentage of other agriculture college students than agricultural education students were influenced by the factor "prizes won at agriculture fairs."

Purdue and Illinois Compared

Factors which show significant differences when the responses of Purdue and Illinois agriculture college students are compared are given in Table IV along with the percentage distribution of responses.

It can be observed in Table IV that a significantly larger percentage of agricultural education students and other agriculture college students at Illinois than at Purdue were influenced by FFA Chapter experience. On the other hand, a significantly larger percentage of both groups at Purdue were influenced by 4-H Club experience. As one might expect, a significantly larger percentage of other students at Illinois than at Purdue were influenced by the study of vocational agriculture in high school.

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Table IV. Factors Which Show Significant Chi-Square Differences When the Responses of Purdue and Illinois Students Are Compared

Factor	A ¹ %	L ² %	N ³ %	Chi-square	
Agricultural Education					
12. 4-H Club experience-----	Illinois Purdue	28 49	37 32	35 19	12.75*
17. FFA Chapter experience-----	Illinois Purdue	39 19	34 22	27 59	22.25**
Others					
12. 4-H Club experience-----	Illinois Purdue	29 40	26 27	45 33	12.78*
13. Studying agriculture in high school -----	Illinois Purdue	43 31	20 20	37 49	11.87*
17. FFA Chapter experience-----	Illinois Purdue	32 18	28 18	40 64	35.52**

¹ A great deal.² Little.³ Not at all.

* Chi-square — Difference due to chance less than 1 in 100.

** Chi-square — Difference due to chance less than 1 in 1000.

It is most important that the teacher - - -

Know the Boy

KENNETH W. MILLIGAN, Vo-Ag Instructor,
Williams High School, Stockbridge, Mass.



Kenneth W. Millikan

MUCH has been written about the value of on-farm instruction as a medium for the teaching of technical facts and for instruction in the development of skills. These facts are so self-evident that further discussion is not necessary. On-farm instruction, in which we will include home visits to pupils who do not live on farms, provides the very best opportunity for the teacher to know the boy.

A few years ago a science teacher told me that he could not teach science to one of our agriculture freshmen. I asked him why, and he said that the boy could not talk his language. I then asked him why he didn't try talking the boy's language. He hasn't answered me yet. It is my contention that the teacher must know the pupil. It is impossible to learn to know each boy, individually, in the

classroom. The classroom is the teacher's home and, in too many instances, the pupils are unwilling visitors. This atmosphere causes the pupils to band together against the teacher, and each individual member unconsciously tends to conform to a common denominator.

It is far more important to most pupils that their classmates have a good opinion of them than that the teacher has a good opinion of them.

A large university was recently making a survey of a small rural school system. One of the observers was visiting the classrooms and asked an instructor what he was teaching. The reply was chemistry. The observer remarked, "I thought you were teaching boys and girls." This little true story is very significant to my mind. It is during the farm and home visits that the teacher can learn to teach the pupil as well as get to know the boy.

Teachers, when discussing pupils, often agree that a certain individual is impossible to teach. If these teachers would visit the pupil in his home or

where he works, they would find out that he was not impossible. It is most likely that they would marvel at how well he does do when his heredity and environment are really understood. The writer has the distinct advantage of working with boys from families that he has known for two and, in some cases, even three generations. This acquaintanceship is very valuable in understanding each individual boy. I have been told by well-meaning individuals that a boy about to enter our department would be a horse thief because his grandfather was a horse thief. Poppycock! I say, "Let each boy stand on his own right to be an individual."

On-farm instruction and home visits are vital in helping the teacher to really know each boy. When this condition actually exists, and only then, the agriculture classroom will be a home for the pupils as well as the teacher.

The vocational agriculture teacher who really takes advantage of his opportunities on supervised farming visits can truly capitalize on the interpretation of education, "A pupil at one end of a log and Mark Hopkins at the other." Remember, Mark Hopkins was one of the original educators who stressed the development of the individual pupil. □

A Comparison - - -

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terests between graduates and drop-outs.

Summary

In summary, Strong Vocational Interest profiles secured at entrance for 97 male agriculture freshmen in a junior college curriculum indicated no significant differences in measured interests except for the vocational agriculture teacher key. A greater percentage of graduates than dropouts had interests similar to vocational agriculture teachers. There was no significant difference in interests in the individual keys for farmer or veterinarian or in the seven groups of interests. Whether similar results would be found in other colleges or with larger samples should be investigated.

It is apparent that factors other than measured interests differentiate graduates from dropouts. In order to prevent the costly trial and error approach in choosing a college major, guidance is needed; and although

the measured interest in the vocational agriculture key is useful in predicting graduation from this junior college agriculture curriculum, other criteria than measured interests are needed in counseling. The chief value of the vocational agriculture key may be in predicting interest in academic work for persons interested in farming.

These dropouts apparently were interested in farming but dropped out for other reasons. They may have lacked the academic interest or aptitude to complete the college curriculum. At any rate the counselor will need other evidence for prediction, such as interest in academic work, ability for college work, and achievement in high school. The economic status may have been a factor in some dropouts. □

The Teacher - - -

(Continued from page 227)

torily high to attract and hold young people.

He must have a good background in commercial farming and an excellent knowledge of technical agriculture if

he is to correctly guide and counsel his students most effectively.

The technological age in which we are now living has placed a greater burden of responsibility on the teacher to be sure that his guidance and counseling is effective and correct, as wrong decisions are far more costly to his students today than they might have been in years gone by.

The challenge is great; the work is exacting and time consuming; but the rewards are highly satisfactory as the teacher sees his students identifying their problems, developing a method of attack, and working out a solution that is sound and logical whether the problems be personal or vocational in nature.

There will be an increasing need for the well trained teacher of vocational agriculture who appreciates the fact that he is first and foremost a guide and counselor to his students, who is emotionally mature in his judgments, and who has a strong belief in the importance of vocational education in the years ahead. □

Opening the door to the future with . . .

The Door Key

CLEMENTS D. BROWN, State Supervisor,
Guidance Services, West Virginia

This article has two points to put across. First, boys in Vo-Ag are getting training and experiences not generally available anywhere else. Second, Vo-Ag leads to a multitude of careers. Third, Vo-Ag boys have a background of farm-life and farm experience. Fourth, each Vo-Ag boy has his own pattern of characteristics and potentialities.

Yes, these are actually just two points: First and second fit together and could be stated: What a Vo-Ag boy gets. Third and fourth state: What a Vo-Ag boy has.

What the Boy Has

The emphasis is on the boy. Possibly what a boy has ought to be considered first. You may call this Individual Inventory or Analysis of the Individual, as a case study, or just plain knowing all that is knowable about him. The fact remains, he has a great deal to offer himself and society. It is our privilege and responsibility to find out what all this is on each one of them. Now a Vo-Ag teacher just doesn't have the time to do all this. That is one of many places where your Counselor or Guidance Director (these people are known by 219 different titles) can fit right in and be of sound, practical help to a Vo-Ag teacher. If this Guidance per-

son does not or cannot help you, find out why. There ought to be records in your Guidance office on such things as mental abilities, scholastic achievement, behavior characteristics, school records, number of and reasons for absences, interests, and, possibly, aptitudes.

Now, couple all this more or less objective information to your knowledge and observations and other subjective information you have as a Vo-Ag teacher and you come closer to knowing a boy better than anyone else.

You will see, as you know so well, that each boy differs in potential. Perhaps he can or can't go back on the farm; perhaps he can but ought not to return to the farm. Of course, this is not your decision to make, it is the boy's decision and he must make it—with your help. If he decides to farm, what kind of farming? You can help him here far better than anyone else. If he decides not to farm, then you and he are going to need some outside help, to answer some very complex questions.

What a Boy Ought to Get

Where does what this boy has, and can get, lead? This includes your valuable Vo-Ag training and his farm life and experience.

How can the boy make a wise decision on where this leads? Will he have to leave the community?

Question piles on question until you and the boy seem smothered. So let's go to the first point: What a Vo-Ag boy gets. Maybe: What a Vo-Ag boy ought to get.

One thing, he gets occupational information. The fog begins to lift; he sees more clearly where his patterns fit in. Along with this, and part of it, is educational information; determining the training necessary to enter and succeed in a career. Military information fits in here, too; how to use his obligatory service in the Armed Forces as a stepping stone toward a career, rather than just so much time out of his three score and ten.

Another thing he gets is self-appraisal. This includes knowledge of the things you got for him from the Guidance person plus a real appreciation of the many ways his farm background and Vo-Ag training can help him in an off-the-farm or on-the-farm career.

Lastly, he gets help to tie all this together. He gets answers to the otherwise smothering questions. He gets the key to the door of his future.

Why? Because the Vo-Ag teacher and the Guidance worker cooperated, because they made an evaluation of the boy, the resources of the community, the untold wealth of individual potential.

And the nice part of it all—it works; the key opens the door; the vision is clear; the field is ready for harvesting—and harvesting is work, joyful work. □

The Development of the Guidance Function of the Agriculture Instructor

V. E. NYLIN, Teacher Education, Wisconsin State College

Many persons have had the privilege of being students of the first teachers to serve under the Vocational Education Act of 1917.

It was that teacher who helped them solve their problems. He was the teacher who went to the home farm, talked to mother and dad and then helped plan the student's program. Motivation was to come from the "felt need" of the student to solve his problem.

The table talk at home was about the suggestions and ideas the agri-

culture instructor had offered. "What should we do now?" was a common statement at the table. The answer often was, "We will ask the 'Ag' teacher about it."

The agriculture instructor was not well equipped with techniques of guidance and counseling, for it was not until World War I that guidance techniques really developed.

The guiding principle or ideal of the agriculture instructor was to "help" the student. "Help" took on many forms and meanings.

The great depression of the twenties and thirties made great demands on the agriculture instructor. Here was the real challenge. How could he be of service to his student in agriculture? It was during this period that workers in Agriculture Education expressed the relationship of parent, student and agriculture instructor as "The Great Triumvirate."

The relationship of the agriculture instructor to his student was ever becoming closer as new problems in

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Farming Status and Practices of Negro Farm Operators in Mississippi County, Missouri

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THE author made an investigation of the farming status and practices of Negro farm operators in Mississippi County, Missouri. Mississippi County has been developed from a plot of heavily timbered area of swampland, overflowed by the Mississippi River at frequent intervals, into an agricultural empire that is not excelled in production by any similar section in any part of the state.

The purpose of the study¹ was to ascertain the current farming status and practices of Negro farm operators of Mississippi County, Missouri. The ultimate purpose was the improvement of the agricultural education program in the county.

A personal farm survey was made of the 80 Negro farm operators, 36 owners and 44 renters, of the county. Data were collected concerning the personal characteristics of the farm operators, land utilization, crop production, livestock, improved farming practices used, condition of farm homes, and conveniences and appliances.

Characteristics of Farm Operators

The ages of the farm operators ranged from 23 to 90 years. The mean age for owners was 56.5 years, and for renters 40.6 years. The farm families ranged in size from 1 to 12 children. The mean number of children per family for owners was 3.9, and for renters 3.4. The highest formal education completed by the farm operators was that of two owners, one who completed the tenth grade and the other the twelfth grade. No farmers under 40 years of age had completed less than fifth grade. Only two farmers above 51 years of age had completed one or more years of high school.

Land Use and Crops Grown

The size of the farms ranged from



Edward W. Barrett

20 to 360 acres for owners, and from 15 to 250 acres for renters. Seventy-one per cent of the owned farms was in cultivation, whereas 90 per cent of farms of renters was under cultivation.

Cotton was the main crop grown and, for many of the farmers, the only cash crop. All except three of the farm operators had cotton. Four owners and one renter had 50 or more acres in cotton. Twenty-five of the 36 owners, and 35 of the 44 renters, had from 1 to 20 acres of cotton. Owners produced slightly more cotton per acre than renters. The yield ranged from 211 pounds to 871 pounds of lint cotton per acre. Eleven of the 80 farmers produced less than 501 pounds per acre, and only 13 farmers produced more than 750 pounds of lint cotton per acre, which was the county average. Of the 13 farmers who had produced more than 750 pounds of lint cotton per acre, seven had completed less than the sixth grade.

The soybean crop is one of Missouri's newest cash crops but many Negro farmers have been reluctant to include it in their cropping systems. Twenty-two of the 36 owners planted soybeans, as compared to 33 of the 44 renters who raised soybeans. Of the 55 operators who grew soybeans, 38 planted less than 21 acres to this crop. The yield of soybeans was from 5 to 35 bushels per acre. Of the 17 farmers who planted 21 or more acres to soybeans, eight had completed the eighth grade or had attended high school. The mean school grade completed by the 20 farmers who reported yields of 5 to 20 bushels per acre was 5.7 years. The mean school grade completed by the 35 farmers who produced yields of 21 or more bushels per acre was 7.2 years.

All owners and 41 of the 44 renters planted corn. The ranges in acres planted were from 2 to 75 acres for the owners, and from 2 to 80 acres for the renters. The renters produced more corn per acre than the owners. Only 10 owners and 15 renters reported corn yields above 40 bushels per acre. Nine of the farmers who had completed only the third grade

planted no more than 20 acres in corn. The farmers who reported corn yields of 21 to 40 bushels had completed a mean of 5.9 years of school. Twenty-seven farmers who produced from 41 to 60 bushels of corn had completed a mean of 7.3 years of formal education.

The range in acres planted to wheat by the operators was from 8 to 30 acres. The average yield was 33.8 bushels per acre.

Fertilizer was applied only to cotton, corn, and wheat crops. Twenty-four owners and 18 renters used no commercial fertilizer. Two owners and six renters used no more than 1,000 pounds. The mean school grade completed by the 42 farmers who did not use commercial fertilizer was 5.1, whereas, the mean school grade completed by the 38 farmers who used fertilizer was 6.5 years.

Livestock Production

Most of the farmers in this study produced some poultry. For the 80 farmers, there was an average of 26 pullets and hens, and 94 baby chicks raised. There appeared to be little relationship between school grade completed and number of hens and pullets on farms. However, farmers with the most years of schooling had raised the largest number of chicks.

There were more sows on the farms of owners than on the farms of renters. The mean difference was 1.4 sows. The number of pigs weaned per farm ranged from 4 to 112. There was no difference in mean school years completed by farmers who had no, or only one sow, and that of the farmers who had two or more sows. The mean for each group was 6.2 years. The 45 farmers who had weaned from 4 to 15 pigs per farm had completed a mean of 6.1 years of school, whereas the 25 farmers who had weaned from 16 to 112 pigs had a mean of 6.7 years.

It was noted that 15 owners and 16 renters did not have any cows. Thirty-eight of the 49 farmers with cows had only one cow, and only one farmer had more than five milk cows. The mean school grade completed

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¹ Extract from M. S. Thesis by author, 1957.

Farming Status - - -

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by the 31 farmers who had no cows was 5.3 years, whereas, the 49 farmers who had milk cows completed a mean of 6.8 years of schooling.

Improved Farm Practices Used

The improved farm practices investigated were classified into categories of (1) poultry, (2) swine, (3) dairy, (4) home garden and orchard, (5) crop and soil management, and (6) farm production planning records.

The greatest number of operators carrying out poultry practices as often as recommended was for the feeding of starter and grower mashes to baby chicks, which was done by 20 owners and 33 renters. Eleven farm operators culled their flocks, 9 fed protein supplements to laying flocks and 10 provided artificial lights for growing chicks.

Over 50 per cent of the farmers separated their sows from the other hogs before farrowing time as was recommended, but only 44 per cent vaccinated pigs for cholera.

About 50 per cent of the farm operators occasionally gave their cows four weeks, or more, rest between gestation and milking periods, but only four carried out the practice as often as was recommended.

Fifty-four per cent of the owners and 27 per cent of the renters carried out the practices of canning fruits and vegetables. Fifty-four per cent of the farmers combated garden insects as was recommended.

The number of farmers who used recommended crop and soil practices as often as recommended ranged from 2 to 76. There were only four owners and eight renters who used farm records in planning and managing the crop and livestock program as often as recommended.

Most of the maintenance jobs that were done on the farms were done by the operators. The renters did an average of 7.8 jobs, as compared to 7.6 jobs that were done by the owners.

Farm Home Condition and Conveniences

Fifty per cent or more of the farm homes were in good condition. The items most needed on the farm homes were screens, steps, and doors. Only three owners and three renters had electric pumps. All of the farmers had outdoor toilets. Seventy-eight per

cent of the operators had radios, and 43 per cent had television sets.

There was a significant difference in the number of farmers with higher formal education who carried out improved practices when compared to those with less formal education. □

The Development - - -

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economic and sociological areas developed.

When 1927-28 brought along the national organization of Future Farmers, the agriculture instructor was in high gear. The FFA fortified the agriculture instructor with added techniques of counseling and guidance. The activities of FFA furnished the instructors with possibilities for guidance that were without equal anywhere.

Paralleling the development of FFA, it finally was accepted that experience in actual life situations affects character. We were further reminded that much of our life experience results from "optional environment." This was the agriculture instructor's opportunity. The instructor can and does have much direct control over school environment. Here was his opportunity to portray desirable character traits attractively by example, by discussion, through books, by active participation of students in agriculture, through farming programs, in FFA, in school classes and other activities. His job as an educator was to guide youth in his choice of life's experiences. He could, perhaps, help the student guard against some experience harmful to his character and help him choose experiences helpful to vocational choices and character development.

Lasting Impressions Formed During Youth

Many of us have now lived long enough to know that there is a lasting value to precept, admonition, and information gained during youth.

Precepts, wise sayings, warnings, and quotations somehow stand in memory, apparently not functioning, and have an odd way of vitally influencing conduct and personality. I do not presume to explain the psychological processes involved in such character training, but personal experience has developed the highest regard for the guidance and counseling offered by the agriculture instructors.

In first interviews with college

freshmen planning careers in agriculture, the question is asked, "Why did you choose a career in agriculture?" The answer very often given is, "My 'Ag teacher' told me there were many jobs in agriculture."

Then the student is asked, "In what area would you like to major?" The student often replies, "I would like to become a teacher of agriculture." When asked why he wished to become a teacher, the student frequently said, "Our Ag teacher seems to have a nice job and he has a good influence in the community."

Further, if the facts could be obtained, I would venture the guess that more sons are named after agriculture instructors than after teachers in other areas of instruction.

The agriculture instructor is in the strategic position of providing natural guidance—personal and educational. This type of guidance comes first because it is sensible and is immediately tested and utilized, and because its values express themselves in any vocation and character situation.

Ideals Are Important

There is also an element of moral guidance. Few would deny that agriculture instructors have "preached" to their students. The instructor is a living pattern for the rural youth, and this direct moral guidance in the form of counsel and information is stressed far more than we are generally aware.

With all the techniques of guidance known to be of value at the present time; with all the guidance resources at a teacher's command—accumulative records and other devices that are used, the problem is one of ideals and "Help."

A true teacher is an inspiration as well as a comfort, not so much by what he does for his students as by what he incites them to do and be because of his example, his deeds and his ideals. What others see in the teacher to admire or to be grateful for is a result of what the students are and of what the students unconsciously have been induced to strive to become.

Within a few years it was evident that this individual, the high school agriculture instructor, was developing certain duties and responsibilities and that would later be described as "peculiar functions of the agriculture instructor." □

Motivation and Problem Solving

Are necessary ingredients of teaching-learning situations.

GAEL KAUFFMAN, Vo-Ag, Instructor, Oroville, California

Motivation? Yes, we've known about it ever since we took our first course in education. We agree that it is important in the learning process. But how many of us are really using motivation effectively in our teaching and getting our money's worth out of it?

Need for Motivation

Broadly speaking, everything we do requires motivation. Motivation has been defined as the force that induces the individual to undertake a task. It frequently implies a problem and the desire to solve the problem.

Experienced teachers may recall with satisfaction instances wherein their classes enjoyed working on specific problems. Somehow the teacher's problem was made the student's problem and the class zestfully undertook the solution. When such a situation existed there was no problem of discipline, no lack of interest. Even though this seems simple, the permissive atmosphere in which such enthusiasm developed did not come naturally.

Natural Impulses Useful in Motivation

How is motivation brought about? Skillful use of the problem solving method makes use of the natural thought processes. This speeds up learning and leads to permanent retention. It is successful just to the extent that the individual accepts the problem as his own. The first step in the solution is really that of becoming aware of the problem. The teacher, as he enters the classroom, may have a problem for discussion—how to control Fowl Pox, for example. But in reality *his* problem is first how to make this problem the *students'* problem—how to interest them in it, to make them want to be able to control Fowl Pox.

There are several natural impulses that we can use, some more effectively than others. Let's list a few of them and then discuss them briefly.

- Participation or activity
- Curiosity and suspense
- Gregariousness
- Altruism
- Desire for approval

Desire for recognition
Pride of accomplishment
Pride of ownership
Love of nature
Creativeness
Competition

Participation or activity can be either physical or mental. If students are given the opportunity to discuss a problem they are immediately much more interested than when merely listening to a lecture. The more realistic and true to life the activity, the more interest will be created.

Each of us has a sense of curiosity. Often the use of a bizarre or novel visual aid will serve to stimulate interest in a new unit. A judicious demonstration of the violent reaction of potassium with water can serve to introduce a unit on the use of commercial fertilizers. Holding the group in suspense as to the outcome or the correct solution is really appealing to the curiosity impulse.

Recognition by our peers and those we hold in respect is a very strong motivating influence. This is especially true among adolescents. Some students will want to do a job simply to gain approval of a teacher whom they like and respect. Students can create discipline problems to gain the approval of other students, too, if wrongly motivated.

Pride of accomplishment can be appealed to in many ways. It is closely related to pride of ownership. Exhibition at fairs and shows, demonstration of skills learned, and the practice of "taking inventory" or periodically reviewing what has been learned appeal to this sense.

Gregariousness, or the desire to be with a group, is strong in adolescents. Forming committees to solve problems, belonging to clubs or organizations such as the FFA, or undertaking group projects of any kind provides motivation beyond that of individual effort.

Most people have a tendency or desire to make other people more happy and to help them. This incentive, which we call altruism, can also be used to create ideals and interests. Allowing the faster or more

advanced members of the class to help the slower ones is one way of using this incentive, and it also teaches the work more effectively.

Virtually everyone, especially a boy, is interested in nature. The creatures and wonders of nature, and the phenomena of growing things, make interest-getting situations in Vocational Agriculture classes relatively easy to obtain.

Problems that call for creative thinking and require doing are more likely to generate interest and to be well accepted than are other types of problems. Yes, they take preparation on the teacher's part, but how can we more profitably spend our time?

The spirit of competition or rivalry is well known to us all. Its use in the classroom as a motivating influence toward a worthwhile goal should not be overlooked. There is one condition here that should be considered, however. Would a basketball game be very much fun if no score was kept? In competing with others, the student is constantly comparing his progress against their progress. He wants to be evaluated fairly, and he looks to the teacher for that evaluation.

Fantastically high prices paid for prize winning stock at Junior Fat Stock Sales, cash awards, ribbons, medals, cups, and plaques given as a reward for achievement are all criticized because their use may not result in permanent learning. It is too easy for the learner to lose sight of the real objective while striving for the prize. Consequently, the instructor must continue to use this incentive in order to maintain interest. If the award is discontinued, the motivation is lost. Offering a tangible award is a very powerful factor in motivation, and for that reason is probably used far too much. To the extent that grades are a reward, their motivating influence is of this same shallow type and does not promote true learning.

Other Means for Motivation

There are some other means for motivation that we can use. First, since success is itself a motivating influence, we should tackle the easy problems first, the harder ones later. The goal must seem attainable and not beyond the student's reach. In a state-wide public speaking contest for Future Farmers of America, little interest could be generated and very

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Problems of Agricultural Education as shown by the - - -

Influence of a decreasing farm population on rural schools

DON M. ORR, Teacher Education, Okla. A & M College.



Don M. Orr

REference is frequently made to the decrease in the number of farms and consequent decrease in farm population in rural areas of the country. These changes have significantly influenced the education of rural youth and the work of the teacher of vocational agriculture. A study of some of the changes in Oklahoma points out the nature of some of the problems that have arisen in connection with the shifts in population.

In Oklahoma, as in many other states, one-room schools developed from the pattern of settlement on the land. The sparse settlement of the farm population, with families living on separate farms, made it difficult to have more than a relatively small number of pupils per school. The lack of year-round roads made it necessary to locate school houses within walking distance of the homes of students. This resulted in the building of schools in each farm neighborhood and the creation of local areas of administration. As a consequence, rural areas came to have many school districts which were small in both land area and school population.

Changes in Oklahoma afford a good example of what is happening to the number of school districts throughout the country. The number of organized school districts in Oklahoma reached a peak in 1912-14 when there were 5,880. Annexation and consolidation reduced the number to 4,450 in 1947. Legislative enactment passed in 1947 reduced the number of school districts to 1,884 by 1954. This is less than one-third the number of districts in 1915.

One-Room Schools Disappear

In 1918 there were 4,805 one-room schools in the state of Oklahoma. By March 1954, there were 613 one-room schools left. Perhaps the most important effect of the consolidation

movement has been the displacement of nearly 4,200 one-room schools in the state. The enlargement of farms, the decrease in farm population, improvement of roads and more rapid means of transportation, and the passage of laws setting minimum average daily attendance limits have been the main factors contributing to the closing of one-room schools.

The one-room school was often the neighborhood center for meetings of concern to farm families. Many teachers of vocational agriculture took advantage of this situation and used the one and two-room schools as places to hold adult meetings.

The disappearance of the local school has left many farm families long distances from a common meeting place. One of the big tasks for many teachers of vocational agriculture is to bring the widely dispersed farm families to recognize the community high school and the department of vocational agriculture as acceptable replacements for the neighborhood one or two-room school.

Loss of Small High Schools

Many small high schools have ceased to function in recent years. The changes in Oklahoma are characteristic of changes in other states. The number of high schools accredited for some work in Oklahoma reached a peak of 884 in 1941. Since 1941 the number of high schools has steadily decreased until only 801 were accredited in 1954.

It is argued that many high schools are too small to function effectively as an educational institution. It is likely, however, that decrease in enrollment has been a greater force in the elimination of small high schools than a desire for better educational facilities. Pride in the local school, prejudice against town schools and fear of increased taxes are strong forces for retaining many small schools still in existence.

The consolidation of two or more small high schools or the annexation of smaller high schools to city schools raises a question of how to best serve

the vocational agricultural education needs of the affected rural areas. It is possible that one teacher may effectively serve the larger district. Multiple teacher departments of vocational agriculture must be considered in such situations, but much study needs to be done on the implementation and supervision of two teacher programs.

Problems of Konowa Are Characteristic

The impact of the changes in the farm population and farming practices in many rural areas may be well illustrated by reporting on the changes that have taken place in the service area of the department of vocational agriculture at Konowa, Oklahoma. This department serves an area including parts of Seminole and Pottawatomie counties.

In 1930, about the time the vocational agriculture department was established at Konowa, there were 2,800 farms in Seminole county and 3,760 in Pottawatomie county. By 1950 the number of farms had decreased to 2,199 for Seminole county and 2,674 in Pottawatomie county.

The total rural population of Seminole county was 18,338 in 1940. This included 9,627 males. Ten years later the total rural population of the county was 9,144, including 4,734 males. In Pottawatomie county the rural population was 18,820 in 1940, including 10,419 males. In 1950 the total rural population had decreased to 10,379 and included only 4,983 males.

Another factor that may have some effect on the teaching of vocational agriculture is the increasing number of farm operators who do not reside on the farms they operate. Perhaps most of this group of operators reside in town. Only 75 operators in Seminole county did not reside on the farms they operated in 1945. By 1950 this number had increased to 168. The change in Pottawatomie county was from 116 in 1945 to 237 in 1950.

Another condition that may have raised the standard of living of farm families and presented new problems to teachers of vocational agriculture is the number of operators who receive income from labor off the farm. By 1950 approximately 54 per cent of the farm operators in Seminole county and 53 per cent of the farm operators in Pottawatomie received income from work off the farm greater than the

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Influence of a - - -

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value of all agricultural products sold from their farms.

The decrease in farm population and the loss of small schools is vividly shown by the changes in schools and school population in the service area of the Konowa department of vocational agriculture. In 1934 the eight schools of the service area had a total school enumeration of 1,685 students. Twenty years later the same area had a combined enumeration of only 710 students. Only two of the original schools operating in 1934 were in existence in 1954.

Records available in the department of vocational agriculture at Konowa show that adult farmer classes were held in each of the eight schools at one time or another since the department was established. In recent years classes have been held at only two of these schools. The buildings in these two districts were retained as neighborhood meeting places.

The change in farm population is reflected in the enrollment of the vocational agriculture department of Konowa. The average enrollment since the department was established is 33.1 students. From 1948 through 1950 the average enrollment of farm boys was 27, and non-farm boys was six. From 1950 through 1954 there was a radical change. The average enrollment of farm boys was 20 and the average for non-farm boys was 18.75.

Problems to Consider

Some of the problems raised by the changes in farm population and farming practices may be as follows: (1) Recognize and meet the vocational agriculture education needs of part-time farmers; (2) Develop total programs of vocational agriculture for a farming situation different from the situation that existed in 1930; (3) Develop adequate programs of supervised farm practice for sons of full-time farmers, of part-time farmers, and of non-farm parents; (4) Elimination of departments of vocational agriculture that no longer meet a vocational need in agriculture; (5) The location of new departments of vocational agriculture; and, (6) A more effective method of carrying on programs of adult education in agriculture. There is a need to give serious consideration to individual instruction on the farm as a part of the work of a teacher of vocational agriculture. □

Factors Influencing - - -

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Summary

The findings of this study regarding factors which influenced agriculture college students to choose agriculture as a career may be summarized as follows:

1. The factors which influenced the largest percentage of students were farm experience factors.
2. Significantly more freshmen than seniors at both institutions were influenced by FFA Chapter experience and the study of vocations in high school.
3. At both universities, a significantly larger percentage of agricultural education students than other agriculture college students were influenced by the factors, "studying agriculture in high school" and "acquaintance with agriculture leaders."
4. At both universities, a significantly larger percentage of other agriculture college students than agricultural education students were influenced by the factor "expect to inherit a farm some day."
5. Significantly more Purdue students than Illinois students were influenced by 4-H Club experience.
6. Significantly more Illinois students than Purdue students were influenced by FFA Chapter experience. □

Motivation - - -

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few contestants were entered each year as long as there was recognition and an award for the state winner only. When the contest was broken down into local, sectional, and regional winners there was a very gratifying number of entries. Proficiency seems to breed interest. Motivation to do a job well increases with performance. My wife became an ardent trout fisherman immediately after she caught her first trout. On the other hand, continued success, or too easy success, soon loses its motivation power. There must be a challenge.

We won't get anywhere until the student decides that the value of achieving the goal is going to be greater than the time and effort needed to reach the goal. Just as motivation cannot be imposed unless the student is willing, so must he

come to this conclusion himself. In adopting any new idea or way of doing a job, we first make an evaluation or a mental application of the idea. We weigh the advantages against the disadvantages. We need to take more time to think through the stages of becoming interested, weighing the situation, and coming to a decision to try to solve the problem or adopt the new idea.

Continued evaluation of progress made during the work on the unit helps to keep interest high as well as to give reassurance that the group is on the right track. It's easy to do and yet we so often overlook doing it. A carpenter, building a house, stops often to check his plans and to evaluate his work.

The more rich and varied the background of experience, the greater will be the motivation with respect to a given problem. This means that we will want to use as nearly real life problems as possible, and will make every effort to connect the student's past experience and present knowledge with the new problem.

Motivation is a kind of contagious thing. It often spreads through a group in the hands of a skillful teacher. One interest may also lead to another, if there is the proper thread of continuity from one problem to another. An over-all problem such as producing certified seed potatoes for the local community can provide the thread of continuity for the many sub-problems to be solved under the big heading of producing potatoes.

A felt need is always a source of motivation. The captain of the football team, who wouldn't dream of making a speech for his English class, tried to be a second Henry Clay as the speaker at the annual football banquet where he was to be evaluated by his fellow team members, whose approval he cherished.

Motivation Means Many Things

Finally, motivation means more than the road to achievement in school work, the learning of new skills and gaining of understanding that add to our fund of knowledge. It means the development of higher ideals in living our everyday lives, in social responsibilities, in emotional responses and attitudes and in a greater appreciation of the aesthetic values that go along with the building of good character. It means develop-

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Professional and Teaching Aids

SUGGESTED LIST OF SUPERIOR PRACTICES FOR SELECTED CROP ENTERPRISES. John B. Sweeker, Agricultural Education Department, West Virginia University. 49 pages 8½ x 11". November, 1956.

A presentation of materials that may be used as a guide by vocational agriculture teachers, when recommending the superior practices to be used by pupils in conjunction with their supervised farming program. One copy to each supervisory and teacher training office.

SUGGESTED LIST OF SUPERIOR PRACTICES FOR SELECTED LIVESTOCK ENTERPRISES. John B. Sweeker, Agricultural Education Department, West Virginia University. 70 pages 8½ x 11". January, 1957.

A presentation of materials that may be used as a guide by vocational agriculture teachers, when recommending the superior practices to be used by pupils in conjunction with their supervised farming programs. One copy to each supervisory and teacher training office.

STEPS IN PRODUCING HIGH QUALITY HAMS AND BACON. Joe P. Bail, Former Associate Professor, Agricultural Education Department, West Virginia University. 10 pages 8½ x 11". 1957.

The material presented is a step by step procedure of methods to use in producing high quality hams and bacon for home use, sale and show. One copy to each supervisory and teacher training office.

VOCATIONAL EDUCATION IN A ROBOT REVOLUTION. Brandon and others. College of Education, Michigan State University, East Lansing, Michigan. 37 pages, 1957. Price \$1.00 each.

A symposium of ideas presented relative to the place of Vocational Education in today's changing times. Topics presented are: Changes and Implications, Challenges to Leadership for Vocational Education, New Dimensions in Technology and Occupational Change, The Individual in our Society, and The Unknown Dimensions.

THE USE OF INSTRUCTIONAL MATERIALS BY TEACHERS OF VOCATIONAL AGRICULTURE IN MICHIGAN. Raymond M. Clark. 1957. Single copies free.

Report of a survey of Michigan teachers regarding their use of instructional materials provided by Instructional Aids Service of the Department of Vocational Education.

SOURCE UNITS. Teachers of Agriculture in cooperation with Division of Agricultural Education. Available from Office of Field Services, College of Edu-

cation, or Vocational Agricultural Service, College of Agriculture, University of Illinois, Urbana, Illinois. Price 15¢ each.

1. Transfer of Property by Farm People.
2. Savings and Investing by Farm People.
3. Common Stock Investments for Farmers.
4. Selecting and Buying Insurance by Farm People.
5. Planning to Increase the Farm Family Earnings.
6. The Use of Operating Agreements in the Establishment of a Farm Boy in Farming.
7. Spending the Farm Family Income.
8. Selecting and Using Credit by Farm Families.
9. Money Management for High School Boys Enrolled in Vocational Agriculture.

Suggested objectives, possible interest approaches, approved practices, typical problems and concerns, possible activities and experiences, evaluation and suggested teaching aids and references for teaching these units in appropriate vocational agriculture classes in high school, young farmer, or adult farmer groups.

SOURCE UNITS. John B. Sweeker and others. Department of Agricultural Education, West Virginia University, Morgantown, West Virginia. 8½ x 11". Single copies free to supervisors and teacher trainers.

1. Safety in the Home and on the Farm. 7 pages. January, 1957.
2. Managing the Farm Woodlot. 7 pages. March, 1957.
3. Forage Crop Insects and Their Control. 4 pages. March, 1957.
4. Controlling Parasites and Diseases of Sheep. 6 pages. May, 1957.
5. Fertilizing for Larger Yields (Corn). 7 pages. April, 1957.
6. Raising Dairy Calves and Heifers to Six Months. 6 pages. July, 1957.
7. Feeding and Management of Market Hogs (From Birth to Market). 7 pages. July, 1957.
8. Producing Quality Feeder Calves. 5 pages. August, 1957.
9. Making Grass Silage. 9 pages. August, 1957.

The material presented in the Source Units is designed to assist vocational agriculture teachers to plan, prepare, and teach jobs in the areas involved, and to supply an up-to-date list of references that may be used to secure the aids necessary to properly teach the job.

SOURCE UNITS. Available from Department of Vocational Education, 302 Agricultural Hall, College of Agriculture, University of Nebraska, Lincoln 3, Nebraska. Price—single copy 25¢ each, 2-10 copies 15¢ each.

1. **FARM INSURANCE.** Ward and McCreight. A source unit containing problems of concern to pupils, activities, and a list of references.
2. **PLANNING ADEQUATE FARM-STEAD WIRING.** Von Bargen and McCreight. A detailed lesson plan for planning an adequate wiring system for a dairy (8 stalls). Forms for analyzing the present wiring system, determining requirements for an adequate wiring system, and changes necessary to have an adequate system are included.
3. **IRRIGATION.** Fischback, Schleusner, and McCreight. This source unit deals with seven (7) problems which commonly confront farmers who want to irrigate. It is designed to help the teacher of agriculture who had limited experience and knowledge of irrigation practices. The material is designed to aid in planning a series of lessons on irrigation. A detailed list of references is included.
4. **PRODUCING CERTIFIED SEED.** A complete lesson plan on producing and merchandising certified hybrid grain sorghum.
5. **FARM LAW.** A source unit suggesting problems for discussion and study on farm law.

SOURCE UNITS. Bureau of Educational Research, Michigan State University, East Lansing, Michigan. Raymond M. Clark and others. Single copies free.

1. Evaluation of Motion Pictures for Use by Teachers of Vocational Agriculture.
2. Marketing Fat Hogs.
3. Christmas Tree Production.
4. Swine Housing and Equipment.
5. Housing for Dairy Cattle.
6. Managing the Beef Herd.
7. Corn Production.
8. Brooding and Raising the Poultry Replacement Flock.
9. Seeding Establishment.
10. Establishment in Farming.
11. Marketing Slaughter Cattle. .

These source units are designed to give teachers suggestions for teaching the various units to high school pupils in vocational agriculture, young farmers, or adult farmer groups.

APPROVED PRACTICE LIST. Department of Teacher Education, Michigan State University, East Lansing, Michigan. Raymond M. Clark and others. Single copies free. 1957.

1. Oats Enterprise.
2. Poultry Enterprise.
3. Farmstead Landscaping.
4. Pasture Enterprise.
5. Barley Enterprise.
6. Alfalfa Enterprise.
7. Sugar Beets Enterprise.

These lists of approved practices are

Professional - - - Aids - - -

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designed to assist Michigan teachers of agriculture in becoming better informed of current recommendations in the various enterprises.

SLIDE FILMS. Audio-Visual Center, Michigan State University, East Lansing, Michigan. Raymond M. Clark and others. 1957.

1. CUTTING THE COMMON RAFTER. B. and W., double frame. Describes methods of cutting the common rafter. For use in classes in farm mechanics. Price \$4.20.
2. ELECTRIC WIRING. B. and W., double frame, 46 frames. Price \$2.50.
3. SELECTION, CARE AND MAINTENANCE OF ELECTRIC MOTORS. B. and W., double frame, 70 frames. Price, \$2.75.

PLANS, RECORDS, AND ACCOUNTS FOR SUPERVISED FARMING IN VOCATIONAL AGRICULTURE, book for Individual Students. Massachusetts State Department of Education. Joint authorship. Available through Division of Vocational Education, 200 Newbury Street, Boston 16, Massachusetts. Single copies available to states. 1957, 36 pages.

A plans, records, and account book especially designed for use of the student of vocational agriculture whose farming program centers primarily around farm work experience (placement training). Featured are forms for use of students in connection with employment agreement, survey of employer's farm facilities for training, daily record of work experience activities, individual training program and progress record, FFA leadership and cooperative activities. In addition, a section is reserved for students conducting one small productive project and recording of improvement projects.

FARM SOILS, SOURCE UNITS, mimeograph booklet, by H. Palmer Hopkins and others. Available through Agricultural Education Department, University of Maryland, College Park, Maryland. Single copies available to states. 1957, 32 pages.

Eight source units in soils intended to cover the basic soils information and experiences needed by vocational agriculture students before reaching farm management problems in the twelfth grade.

ORGANIZING AND CONDUCTING YOUNG FARMERS PROGRAMS IN NEW YORK, bulletin, New York State Department of Education, Harold R. Cushman. Available through Bureau of Agricultural Education, Albany 1, New York. 1957, 50 pages.

This bulletin was prepared to assist teachers of agriculture, school principals, superintendents of schools, directors of

adult education, agricultural advisory boards and boards of education in developing programs for young farmers.

Emphasis is placed on the following phases of the young farmer program: making administrative arrangements, determining instructional needs and planning instructional programs, conducting group instruction with young farmers, giving on-farm instruction, organizing and conducting local young farmer associations and continuation and improvement of the young farmer program.

Submitted by:

JOE P. BAIL, Chairman

National Professional Information

Committee

(Teacher Education, Cornell

University, Ithaca, New York)

TIPS THAT WORK—

A Community Service Activity

FFA Chapters having trouble selling their chapter to the community should try the following community service activity:

Have your community service committee organize a "Keep Our School Beautiful" campaign. Have the committee print up a good set of rules on a large cardboard to be placed in the school building or buildings. The same committee should then contact the grade school teachers and make a date to meet with the classes individually to explain the importance of school beautification and improvement. The committee can also hand out a printed set of rules to abide by.

As a reward for the cooperation of the grade school student body, or both grade and high school students, offer prizes to those who contribute the most. Let the teachers be the judges since they are best qualified to keep an alert eye on their students.

Chapter members locally found that many hours spent on school improvement don't have much meaning to the remaining student body unless it is brought to their attention. After the destruction of shrubs and flowers planted by local members, the boys in the chapter were anxious to spend the time so that their efforts would be more meaningful. Don't forget to publicize the activity.

ROLLIE STUKENHOLTZ

Vo-Ag Instructor,

Ansley, Nebraska

Motivation - - -

(Continued from page 236)

ing higher ideals for a better family and community life, a better understanding of what democracy means, and a greater awareness of individual social and economic responsibility. We, as teachers, have this responsibility too—probably a greater one than the mere attainment of knowledge on the part of our students. Of this we should be ever mindful.

Bibliography

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 Gordon, Thomas, *Group Centered Leadership*.
 Hall, D. M., *Dynamics of Group Action*, 1957.
 Iowa State College Agr. Extension Service, Special Service Report No. 15, *How Farm People Accept New Ideas*, 1955.
 Kettelcamp, Gilbert C., *Training Adolescents*, 1953.
 Lancelot, W. H., *Permanent Learning*, 1944.
 Maslow, Abraham, *Motivation and Personality*, 1954.
 Simpson, Ray, *Improving the Teaching—Learning Processes*, 1953.

Evaluation

By E. W. GARRIS, Teacher Education, University of Florida.

How may I measure the results of work
As I attempt to teach from day to day?

Shall it be the amount of my salary,
Or may I depend on what pupils say?

May I use the number of awards won
By my students in various state contests?

Shall it be the publicity program
On which the value of all my service rests?

May I count the number of pupils
Enrolled last September in my classes?
Or shall I check accomplishments of each
In terms of course work he passes?

No, teaching is not done for fame or show,
Personal advancement, salary, or both;
The result that satisfies a teacher
Is to note proper educational growth.

Growth in ability to solve life's problems,
Knowing how and when to plow the fertile sod;
How to live safely with other people—
Above all, following the guidance of God.

HELP

Dr. W. A. Smith, Cornell University, Ithaca, New York, would like to obtain a copy of each of the following issues of *The Agr. Ed. Mag.* to bring Departmental files up-to-date:

Volume VI—

March 1934—No. 9; April 1934—No. 10; May 1934—No. 11

Volume XXVIII—

November 1955—No. 5

Next Month—Evaluating Programs of Agricultural Education

News and Views of the Profession

Cushman to Philippines



Harold R. Cushman

HAROLD R. CUSHMAN, Associate Professor of Rural Education at Cornell University, has accepted an 18-month assignment as Visiting Professor of Agricultural Education at the College of Agriculture, University of the Philippines.

While at Los Banos, he will be a member of the Cornell University team consisting of a professor from each department of the New York State College of Agriculture working under the terms of the Cornell-L.C.A. Contract. Dr. Halsey B. Knapp is the project leader. Cushman will succeed Prof. Russell O. Dickerson who has returned to his duties as Associate Dean of the College of Agriculture at Penn State following a similar assignment.

Professor Cushman has been a Special Editor of *The Agricultural Educational Magazine* since 1951. Prior to joining the Agricultural Education Division at Cornell University in 1955, he served as a teacher of vocational agriculture, assistant state supervisor, and teacher trainer in Vermont.

Harold and Beryl, accompanied by children Richard (17), Robert (11), Janette (7), and William (2), arrived at Los Banos early in February. Their address until August 1959 will be: U.S.O.M., A.P.O. 928, c/o Postmaster, San Francisco, California. □

O'Kelley to U. S. Office of Education

George L. O'Kelley has recently been appointed to the position of Specialist in Teacher Training and Service Studies in the U. S. Office of Education. In addition to his teacher training duties, his work there will include assisting the various states in conducting research in agricultural education and carrying on independent research.

O'Kelley was born June 27, 1913, in Hull, Georgia. He received his B.S. and M.S. degrees from the University of Georgia in 1934 and 1941, respectively. He was awarded the Ph.D. degree by Cornell University in 1951. His teaching career began in the public school system of Jefferson County, Georgia, where he taught from 1934-1937. He was on the staff of the University of Georgia as a critic teacher in agriculture from 1937-1946 and as a professor of agricultural education from 1946-1957.

Honors received by O'Kelley include

election to Alpha Zeta, Kappa Delta Pi, Phi Delta Kappa, Phi Kappa Phi and Agthon Society. He was elected to receive the Alumni Association Distinguished Teaching Award, College of Education, University of Georgia, in 1955. He was also awarded the Honorary Georgia Planter degree by the Georgia Association FFA. Offices which he held include secretary and member, Board of Directors, Southern Association of Agricultural Engineering and Vocational Agriculture; secretary and member, Board of Directors, Southern Regional Conference for Agricultural Education; and secretary and member, Faculty Executive Committee, University of Georgia. He is a member of the Baptist Church, the Masonic Lodge, Lions Club, and Alpha Gamma Rho. His hobby is farming.

O'Kelley is a frequent contributor to *The Agr. Ed. Mag.* He is listed in *Who's Who in American Education* and in *Who's Who in the South*. □

Meaders Appointed to New Position



Donald Meaders

A new position in agricultural education and continuing education has been established that will provide much needed service to schools and communities in Michigan's Northern Peninsula. Dr. Donald Meaders has been appointed

to fill this position. He will be stationed at Marquette in the M.S.U. Office of Continuing Education and will hold joint appointment in the Agricultural Education Service of the Department of Teacher Education. He will begin his new duties in February.

In this new position Dr. Meaders will assist schools in the improvement of programs of instruction in agriculture, both vocational and nonvocational, in inservice education for teachers and in research and development of instructional materials. One objective of the work will be to help bring together the schools and the resources in the broad fields of agriculture for the improvement of the economy and the lives of the people of the area.

Dr. Meaders was born and reared on a general farm in Nebraska. He served three years in the army, including service in the European theater of operations. His Bachelor's and Master's degrees were received from the University of Nebraska. Dr. Meaders taught vocational agriculture at Lewiston, Nebraska for three

years, 1947-1950 and at Wilbur, Nebraska, 1951-1953, where he also served as a supervising teacher for agricultural education students.

Mr. Meaders came to Michigan in 1953 to work on the Ed.D. degree. He served as a graduate assistant in agricultural education at Michigan State University, 1954-1955, and was awarded the Doctor of Education degree in 1957. Dr. Meaders has served as Consultant in the Agricultural Education Division of The Michigan Department of Public Instruction since October, 1955. He is affiliated with MEA, MATVA, and AVA and is a member of Phi Delta Kappa, Alpha Zeta, and Gamma Sigma Delta. He has attended the University of Illinois and Oklahoma State University. He is married and has two children.

The Cover Picture

Most of the work of the vocational agriculture teacher is basically guidance. First, he helps his students determine whether they wish to become employed in agriculture. After that decision has been made, the teacher guides his students in reaching a great number of decisions that will eventually make them successful farmers. This is done through the use of many instructional and guidance techniques.

Here Raymond Tengan, right, vocational agriculture instructor of Castle High School in Kaneohe on Oahu, Hawaii, is helping Joel Wong, vice president, Hawaiian Association of Future Farmers of America, determine when to pick his bananas. Three years of careful guidance has made Joel an outstanding young farmer in his community. □



PRINCIPLES OF PUBLIC SECONDARY EDUCATION by Dr. Harold C. Hand, Professor of Education of University of Illinois. Harcourt, Brace and Company, New York. 1957. 369 p.

Dr. Hand, who grew up on a farm, has long admired our efforts in agricultural education. He has been a high school teacher and principal and has taught at Columbia, Stanford, Maryland, and Illinois. His present book presents a concept of secondary education congenial to teachers of agriculture and indicates the practices necessary to carry it out. It answers well those who would take us back to a 15th century concept of secondary education. —H.M.H.



E. V. Walton (left), head of the Department of Agricultural Education at Texas A & M, supervises the awarding of a \$125 scholarship at the annual Student-Prof. Banquet. Raymond Dolezal (center) is making the presentation to George Svatek. The scholarship funds are provided by the A & M Collegiate FFA Chapter.

(Photo by J. D. Gray)



Mr. Sam Coumbs, mechanic, checks with Bill Weber and Charles Colleary, students, doing farm machinery repairs in connection with the Vo-Ag farm mechanics program in Quincy, Washington.

Stories In Pictures



An Agricultural Education Adviser from Panama, George Riesner (with coat) makes a return visit to the Department of Agricultural Education at The Pennsylvania State University, where he was greeted by (left to right) Norman K. Hoover, William F. Hall, and Brinton Gearhart.



Dr. J. C. Miller, Dean of the College of Agriculture at Texas A & M College, addresses a meeting of the A & M Collegiate FFA Chapter. He pointed out to the juniors and seniors that the future in agriculture is still bright for those who are capable and willing to apply themselves.

(Photo by J. D. Gray)



Ohio State student, Dave Jenkins, gives a few pointers to Bishan Singh Sandhu, who received a Master's degree in Agricultural Education after spending a year at Ohio State University. Jenkins and Sandhu were carrying out an assignment in a graduate course in Teaching Aids.

(Photo by Howard L. Miller)



Dr. W. T. Spanton, National FFA Advisor, posed for this picture with Senkaya Bayraktar, Turkish exchange student and John A. Scott, Voc. Agri. Instr., Sumner, Iowa, during the National Convention. Senkaya is being sponsored in this country by the student body of the Sumner Community High School for one year's study. He is enrolled in the sophomore vocational agriculture class and is an honorary member of the Sumner FFA Chapter. He was presented the official FFA jacket shortly before the National Convention by chapter officers. Senkaya plans to teach in his own country following completion of high school and the University.

